REMARKS

Initially, in the Office Action dated August 9, 2005, the Examiner objects to the title as not being descriptive. Claims 1-4, 8, 12 and 13 have been objected to because of informalities. Claims 1-13 have been rejected under 35 U.S.C. §112, second paragraph. Claims 1-3, 12 and 13 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication No. 2005/0021727 (Matsunami et al.). Claims 4-11 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Matsunami et al.

By the present response, Applicants have amended claims 1-4, 6, 8, 12 and 13 to further clarify the invention. Claims 1-13 remain pending in the present application.

Specification Objection

The Examiner has indicated that the title of the invention is not descriptive and has required a new title. Applicants have provided a new title of the invention and respectfully request that this objection be withdrawn.

Claim Objections

Claims 1-4, 8, 12 and 13 have been objected to because of informalities. Applicants have amended these claims to further clarify the invention and respectfully request that these objections be withdrawn.

35 U.S.C. §112 Rejections

Claims 1-13 have been rejected under 35 U.S.C. §112, second paragraph. Applicants have amended the claims of the present application to further clarify the invention and respectfully request that these rejections be withdrawn.

35 U.S.C. §102 Rejections

Claims 1-3, 12 and 13 have been rejected under 35 U.S.C. §102(e) as being anticipated by Matsunami et al. Applicants respectfully traverse these rejections.

Matsunami et al. discloses a computer system that consists of components including more than one computer and storage subsystem to which more than one computer are connected. The storage subsystem is equipped with more than one storage unit management table registering information to manage storage units accessible by each of the computers and a controller to control accesses by more than one computer to more than one storage unit. The controller controls the accesses according to the information set in the management table when the storage unit is accessed by the computer.

Regarding claims 1, 12 and 13, Applicants submit that Matsunami et al. does not disclose or suggest the limitations in the combination of each of these claims of, inter alia, a single shared volume being used in common among all of a plurality of clients, or where at a specified time, specific data in the shared volume for each of the plurality of clients is output to each of the plurality of clients simultaneously, some of the specific data output being the same for some of the plurality of clients. The Examiner asserts that Matsunami et al. discloses shared volumes in Figs. 4 and 6.

However, these portions of Matsunami et al. merely disclose a logical unit number management table and a diagram showing an example of a concrete allocation of logical units to computers. However, this is not <u>a single shared volume that is used in common among all of a plurality of clients</u>, as recited in the claims of the present application. Matsunami et al. merely discloses that some logical units are private to a specific computer and that some are shared with a second computer. As shown in Figs. 4 and 6 of Matsunami et al., a logical unit is shared between either two or three, at most, computers. Moreover, these portions of Matsunami et al. disclose <u>multiple shared logical units</u>. In contrast, the limitations in the claims of the present application relate to <u>a single shared volume</u> being used among <u>all</u> of the <u>plurality of clients</u>.

Moreover, Matsunami et al. does not disclose or suggest wherein at <u>a specified time</u> specific data in the shared volume for each of the plurality of clients <u>is output to each of the plurality of clients simultaneously</u>. Matsunami et al. does not disclose or suggest data from a single shared volume being output simultaneously to all of the plurality of clients. Moreover, the cited reference does not disclose or suggest anything related to some of the data being output simultaneously to all of the clients being the same for some of the plurality of clients, as recited in the claims of the present application.

Regarding claims 2 and 3, Applicants submit that these claims are dependent on independent claim 1 and, therefore, are patentable at least for the same reasons noted previously regarding this independent claim. For example, Applicants submit

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that Matsunami et al. does not disclose or suggest where the client is allowed to perform remote boot upon receiving data supplied from the data source device and wherein the shared volume stores the data provided to the plurality of clients at the remote boot, or where the block mapping management module maps at least part of virtual blocks on the plurality of virtual volumes with the uniformed shared block.

Accordingly, Applicants submit that Matsunami et al. does not disclose or suggest the limitations in the combination of each of claims 1-3, 12 and 13 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

35 U.S.C. §103 Rejections

Claims 4-11 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Matsunami et al. Applicants respectfully traverse these rejections and submit that these claims are dependent on independent claim 1 and, therefore, are patentable at least for the same reasons noted previously regarding this independent claim. For example, Applicants submit that Matsunami et al does not disclose or suggest where a plurality of node devices having a cache function of the data are connected between the data source device and the plurality of clients, the data source device further including a specific information output module that outputs specific information to the node device, the specific information being used to determine the volume in which each data is stored, the shared volume or the specific volume, in response to a request from the node device, or where the specific

information output module outputs the specific information regarding a plurality of

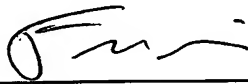virtual blocks at a predetermined schedule regardless of the read out command.

Accordingly, Applicants submit that Matsunami et al. does not disclose,

suggest or render obvious the limitations in the combination of each of claims 4-11 of

the present application. Applicants respectfully request that these rejections be

withdrawn and that these claims be allowed.

In view of the foregoing amendments and remarks, claims 1-13 are now in

condition for allowance. Accordingly, early allowance of such claims is respectfully

requested.

To the extent necessary, Applicants petition for an extension of time under 37

CFR 1.136. Please charge any shortage in fees due in connection with the filing of

this paper, including extension of time fees, or credit any overpayment of fees, to the

deposit account of Mattingly, Stanger, Malur & Brundidge, P.C., Deposit Account No.

50-1417 (referencing attorney docket no. 1288.43076X00).

Respectfully submitted,

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